DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Response to Amendment

2. Applicant's amendment filed on March 3, 2008 has been entered. Claims 1-2, 4-14, and 16-22 are still pending in this application, with claims 1, 6, 11-13, 16, and 21-22 being independent. Claims 3 and 15 have been cancelled.

Response to Arguments

3. Applicant's arguments with respect to claims 1-22 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims 1-2, 4-7, 11-14, 16-17, and 21-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Musgrave et al (US 6,377,699 B1).

Regarding **claim 1**, Musgrave et al disclose a photographing apparatus for photographing an object, comprising an illuminating unit which irradiates light of a band

of a small energy in natural light to the object (column 2, lines 16-21); and a photographing unit which obtains reflection light of the light which has been irradiated from said illuminating unit and reflected by said object and obtains a video image of said object on the basis of said obtained reflection light (column 6, lines 5-16).

Further, Musgrave et al disclose wherein wavelengths from about 680 nanometers to about 900 nanometers are included in the band of the small energy in said natural light (column 4, lines 52-54). Although Musgrave et al do not specify wavelengths from about 760 nanometers to about 766 nanometers, at the time of the invention it would have been obvious to a person having ordinary skill in the art to make use of those wavelengths, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980). Further, there is no record that selection of the said narrow range of wavelengths would produce unexpected results in the art.

Regarding **claim 2**, Musgrave et al further disclose wherein said illuminating unit irradiates the light including a plurality of wavelengths of the small energies in the natural light in said band (column 4, lines 52-54).

Regarding **claim 4**, Musgrave et al further disclose a light source unit which forms a light source having various wavelengths (column 4, lines 52-54) and a low energy pass filter which allows the light of the band of the small energy in the natural light in said light source formed by said light source unit to pass (column 4, lines 45-49).

Regarding **claim 5**, Musgrave et al further disclose a reflection light pass filter which obtains said reflection light (column 4, lines 45-49), and a photoelectric converting

unit which converts said reflection light which has passed through said filter into an electric signal (column 6, lines 29-30; lines 66-67; column 7, lines 1-5).

Regarding **claim 6**, Musgrave et al disclose an organism information recognizing system for recognizing an object on the basis of organism information (column 1, lines 6-9) which is formed on the basis of a video image of said object (column 4, lines 27-30), comprising a photographing apparatus having an illuminating unit which irradiates light of a band of a small energy in natural light to the object (column 2, lines 16-21); and a photographing unit which obtains reflection light of the light which has been irradiated from said illuminating unit and reflected by said object and obtains the video image of said object on the basis of said obtained reflection light (column 6, lines 5-16).

Further, Musgrave et al disclose wherein wavelengths from about 680 nanometers to about 900 nanometers are included in the band of the small energy in said natural light (column 4, lines 52-54). Although Musgrave et al do not specify wavelengths from about 760 nanometers to about 766 nanometers, at the time of the invention it would have been obvious to a person having ordinary skill in the art to make use of those wavelengths, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980). Further, there is no record that selection of the said narrow range of wavelengths would produce unexpected results in the art.

Regarding **claim 7**, Musgrave et al further disclose wherein said organism information recognizing system recognizes an iris of said object as organism information (column 2, lines 35-42).

Regarding **claim 11**, Musgrave et al disclose a photographing apparatus having an illuminating unit which irradiates light of a band of a small energy in natural light to the object (column 2, lines 16-21); and a photographing unit which obtains reflection light of the light which has been irradiated from said illuminating unit and reflected by said object and obtains the video image of said object on the basis of said obtained reflection light (column 6, lines 5-16).

Further, Musgrave et al disclose wherein wavelengths from about 680 nanometers to about 900 nanometers are included in the band of the small energy in said natural light (column 4, lines 52-54). Although Musgrave et al do not specify wavelengths from about 760 nanometers to about 766 nanometers, at the time of the invention it would have been obvious to a person having ordinary skill in the art to make use of those wavelengths, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980). Further, there is no record that selection of the said narrow range of wavelengths would produce unexpected results in the art.

Regarding **claim 12**, Musgrave et al disclose a photographing apparatus having an illuminating unit which irradiates light of a band of a small energy in natural light to the object (column 2, lines 16-21); and a photographing unit which obtains reflection light of the light which has been irradiated from said illuminating unit and reflected by said object and obtains the video image of said object on the basis of said obtained reflection light (column 6, lines 5-16).

Further, Musgrave et al disclose wherein wavelengths from about 680 nanometers to about 900 nanometers are included in the band of the small energy in said natural light (column 4, lines 52-54). Although Musgrave et al do not specify wavelengths from about 760 nanometers to about 766 nanometers, at the time of the invention it would have been obvious to a person having ordinary skill in the art to make use of those wavelengths, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980). Further, there is no record that selection of the said narrow range of wavelengths would produce unexpected results in the art.

Regarding **claims 13-14**, Musgrave et al disclose the claimed invention in the same manner as applied to claims 1-2 above, respectively.

Regarding **claims 16-17**, Musgrave et al disclose the claimed invention in the same manner as applied to claims 6-7 above, respectively.

Regarding **claims 21-22**, Musgrave et al disclose the claimed invention in the same manner as applied to claims 11-2 above, respectively.

6. Claims 8 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Musgrave et al (US 6,377,699 B1) in view of Dobashi et al (US 2001/0031072).

Regarding **claim 8**, Musgrave et al disclose all the limitations of the invention as applied to claim 6 above.

Musgrave et al do not disclose wherein said organism information recognizing system recognizes a face of said object as organism information.

Dobashi et al disclose an organism information recognizing system that recognizes a face of said object as organism information (paragraph 72).

At the time of the invention, it would have been obvious to a person having ordinary skill in the art to combine Dobashi et al with Musgrave et al because the substitution of one known element, that of face recognition, for another, that of iris recognition, would have yielded predictable results of identification verification.

Therefore, it would have been obvious to combine Dobashi et al with Musgrave et al to obtain the invention as disclosed in claim 8.

Regarding **claim 18**, the combination of Dobashi et al and Musgrave et al teach all of the limitations as applied to claim 8, above.

7. Claims 9-10 and 19-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Musgrave et al (US 6,377,699 B1) in view of Piosenka et al (US 4,993,068).

Regarding **claim 9**, Musgrave et al disclose all the limitations of the invention as applied to claim 6 above.

Musgrave et al do not disclose wherein said organism information recognizing system recognizes a retina of said object as organism information.

Piosenka et al disclose an organism information recognizing system that recognizes a retina of said object as organism information (column 8, lines 41-43; lines 50-61).

At the time of the invention, it would have been obvious to a person having ordinary skill in the art to combine Piosenka et al with Musgrave et al because the substitution of one known element, that of retina recognition, for another, that of iris recognition, would have yielded predictable results of identification verification.

Therefore, it would have been obvious to combine Piosenka et al with Musgrave et al to obtain the invention as disclosed in claim 9.

Regarding **claim 10**, Musgrave et al disclose all the limitations of the invention as applied to claim 6 above.

Musgrave et al do not disclose wherein said organism information recognizing system recognizes a fingerprint of said object as organism information.

Piosenka et al disclose an organism information recognizing system that recognizes a fingerprint of said object as organism information (column 8, lines 43-45; lines 50-61).

At the time of the invention, it would have been obvious to a person having ordinary skill in the art to combine Piosenka et al with Musgrave et al because the substitution of one known element, that of fingerprint recognition, for another, that of iris recognition, would have yielded predictable results of identification verification.

Therefore, it would have been obvious to combine Piosenka et al with Musgrave et al to obtain the invention as disclosed in claim 10 above.

Regarding **claims 19-20**, Piosenka et al in combination with Musgrave et al disclose the claimed invention in the same manner as applied to claims 9-10 above, respectively.

Conclusion

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

9. Any response to this office action should be faxed to (571) 273-8300 or mailed to:

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Hand - delivered responses should be brought to:

Customer Service Window
Randolph Building
401 Dulany Street

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to MICHAEL A. STRIEB whose telephone number is

(571)270-3528. The examiner can normally be reached on Monday-Friday 8am-5pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick Assouad can be reached on (571) 272-2210. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/William B. Perkey/
for Patrick Assouad, SPE of Art Unit 2862

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